

Applicant : Visser et al.

Serial No. : Not assigned - 35 U.S.C. 371 entry of PCT/NL00/00406

Filed : December 11, 2001

Page 2

7. Method according to claim 1, in which the protein or polypeptide is an enzyme that can interact with starch or starch granules, in particular an enzyme that can convert, modify, alter, degrade or otherwise influence the starch, the starch granule or the structure or interactions thereof.

8. Method according to claim 1, in which the desired protein or polypeptide is a receptor such as an estrogen receptor or a plant hormone receptor, or a structural protein such as a protein "zipper".

11. Method for providing a plant that expresses a fusion of at least one desired protein or polypeptide and at least one starch binding domain, as expressed in and/or present in a plant or in any part of a plant, including its seeds, leaves, roots (including tuberous roots), tubers, stems, stalks, fruits, grains or flowers (in particular the honey-producing parts thereof) comprising at least one step of : a) transforming plant with a genetic construct according to claim 10, such that said genetic construct is expressed in the plant or at least in part thereof ; and optionally further comprising at least one step of : b) providing descendants and/or further generations of the thus transformed plant, for instance via sexual or asexual multiplication, including crossing and/or other breeding techniques.

14. Plant that expresses a fusion of at least one desired protein or polypeptide and at least one starch binding domain, as expressed in and/or present in a plant or in

Applicant : Visser et al.
Serial No. : Not assigned - 35 U.S.C. 371 entry of PCT/NL00/00406
Filed : December 11, 2001
Page 3

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any part of a plant, including its seeds, leaves, roots (including tuberous roots), tubers, stems, stalks, fruits, grains or flowers (in particular the honey-producing parts thereof) obtainable by the method of claim 10.

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15. Seeds, tubers, seedlings or other cultivating material of a plant according to claim 13.

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20. Method for providing a plant that can produce a complex comprising a fusion of a protein or polypeptide fused to at least one starch binding domain, associated with a starch granule, comprising at least the step of : a) transforming a starch granule producing plant with a genetic construct, suitable for transforming a plant, comprising at least one nucleotide sequence encoding a desired protein or polypeptide combined with at least one nucleotide sequence encoding a starch binding domain, so that the construct encodes a fusion of the desired protein/polypeptide and the at least one starch binding domain such that said genetic construct is expressed in the plant or at least part thereof ; and optionally further comprising at least a further step of : b) providing descendants and/or further generations of the thus transformed plant, for instance via sexual or asexual multiplication, including crossing and/or other breeding techniques.

21. Plant that produces a complex of at least one protein or polypeptide and a starch granule, comprising at least one step of : a) expressing the protein or polypeptide as a fusion with at least one starch binding domain, in a plant that contains or forms

Applicant : Visser et al.
Serial No. : Not assigned - 35 U.S.C. 371 entry of PCT/NL00/00406
Filed : December 11, 2001
Page 4

a4 starch granules ; and optionally comprising a further step of : b) isolating the protein or polypeptide from the plant or any part thereof as a complex of the fusion and the starch granule and that is obtainable via the method of claim 20.

a5 24. Plant that produces modified starch or starch granules, and that is obtainable via the method of claim 23.

a6 26. Method for producing a modified starch and/or modified starch granules, comprising at least one step of : a) cultivating a transformed plant that produces a modified starch and/or modified starch granules according to claim 24; and optionally comprises at least one further step of : b) isolating the modified starch or starch granules from the transformed plant or any part thereof, including its seeds, leaves, roots (including tuberous roots), tubers, stems, stalks, fruits, grains or flowers (in particular the honey-producing parts thereof).

a7 28. Modified starch or starch granules, obtained via the method of claim 26, obtained from a plant that produces modified starch or starch granules, and that is obtainable via the method of claim 23.

a8 30. Plant that produces modified starch or starch granules, obtainable via the method of claim 29.

a9 32. Method for producing a modified starch and/or modified starch granules, comprising at least one step of : a) cultivating a transformed plant that produces a

Applicant : Visser et al.
Serial No. : Not assigned - 35 U.S.C. 371 entry of PCT/NL00/00406
Filed : December 11, 2001
Page 5

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modified starch and/or modified starch granules according to claim 27; and optionally further comprises at least one step of : b) isolating the modified starch or starch granules from the transformed plant or from any part thereof, including its seeds, leaves, roots (including tuberous roots), tubers, stems, stalks, fruits, grains or flowers (in particular the honey-producing parts thereof)

33. Modified starch or starch granules, obtained via the method of claim 32.

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36. Bacterium, virus or other organism suitable for transforming a plant, containing a genetic construct according to claim 10 or 35, and preferably capable of transferring said construct into a plant.

Please add new Claims 37 and 38 as follows:

--37. Seeds, tubers, seedlings or other cultivating material of a plant according to claim 14.

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38. Modified starch or starch granules, obtained from a plant that produces modified starch or starch granules, obtainable via the method of claim 29.--